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# PARASITIC MITES OF SURINAM. VIII. A NEW GENUS AND SPECIES OF CHIGGER, *FAURANIUS ATECMARTUS*, AND ADDITIONAL RECORDS OF SPECIES (ACARINA: TROMBICULIDAE)[1]

James M. Brennan[2] and F. Lukoschus[3]

Abstract: Twenty-six species of chiggers are now known from Surinam. Nineteen are recorded here. *Fauranius* new genus is described for *F. atecmartus*, new species off *Philander opossum* and *F. myoproctae* (Fauran, 1960), new combination.

This paper augments a recent report (Brennan, 1970) in which 11 species of chiggers are recorded from Surinam. Fifteen additional species, one new, are recorded here. All material was collected by the junior author.

Two specimens of each species, as available, will be deposited in Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands, and National Collection of Surinam, Centraal Laboratorium, Paramaribo.

### **Fauranius**, new genus

Type species: *Fauranius atecmartus*, new species. Neotropical trombiculine larvae. Leg segmentation 6-6-6 (unique in subfamily Trombiculinae); 2 genualae I, sub- and parasubterminala, microtarsala I proximad of tarsala I, no genuala II and III, a tibiala III, no mastisetae. Scutum wider than long, the posterolateral setae extrascutal, sensillae probably expanded (as suggested by remaining stubs). Apparently, eyes may be present or absent.

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Cheliceral blade with tricuspid cap. Galeal seta nude. Palpal tibial claw trifurcate, palpal tarsus with 5 branched setae and a tarsala.

Distinguished from *Pseudoschoengastia* by leg segmentation 6-6-6 and absence of setae between coxae II and III. *Referred species: Pseudoschoengastia myoproctae* Fauran, 1960.

*Fauranius* is named for Dr. Pierre Fauran, Pasteur Institute of French Guiana, who has made significant contributions to the knowledge of neotropical chiggers.

## **Fauranius atecmartus,** new species

*Type data:* Holotype and 2 paratypes, RML 55406, from ears of *Philander opossum*, Coronie, Surinam, 28 November 1969, F. Lukoschus.

Holotype to be deposited in Rijksmuseum van Natuurlijke Historie, Leiden; paratypes in the Rocky Mountain Laboratory.

*Diagnosis:* Leg segmentation 6-6-6. Extrascutal posterolateral setae; less than 30 dorsal setae; no genuala II and III, no mastisetae, microtarsala I proximad of tarsala I. Distinguished from *F. myoproctae* by differently shaped scutum, PL>AM, smaller leg index because of shorter leg II, smaller tarsalae I and II, and microtarsala I much closer to tarsala I.

*Body:* A small chigger, broad-ellipsoidal when engorged. Eyes not discernible. Anus at sixth row of ventral setae. Length and width of holotype, nearly engorged, 335 by 260$\mu$.

*Gnathosoma:* Sparsely punctate. Cheliceral blades with small tricuspid cap. Galeal seta nude. Palpal setae sparsely branched, B/B/BNB, tarsus 5B and a tarsala, tibial claw trifurcate.

*Scutum:* As figured, lightly punctate; sensillae broken off in all specimens, but in one the remaining stubs are suggestive of expanded heads; extrascutal PL>AM>AL. Scutal measurements of holotype; AW 47, SB 32, ASB 18, PSB 17, AM 27, AL 18, PL 34.

*Legs:* Segmentation 6-6-6. Lightly punctate, specialized setae as figured; 2 genualae I, sub- and parasubterminala, no genuala II and III, a tibiala III, no mastisetae, microtarsala I proximad of tarsala I. Nonspecialized setae sparsely branched. Coxal III seta slightly anterior of center.

*Body setae:* Dorsal setae; humerals 34$\mu$, dorsals 25 to 31$\mu$, arranged 2-6-6-6-4-4 (holotype), 2-6-6-6-4-2 (a paratype). Ventral setae 2-2 plus 36; postanals, paranals, and preanals of last 2 rows similar in form to dorsals.

*Remarks:* Fauran (1960) described *Pseudoschoengastia myoproctae* in detail from a single specimen attached to teat of *Myoprocta acouchy*, Moyenne-Mana, French Guiana, April 1960. He noted the unique 6-6-6 leg segmentation. Geest and Loomis (1968) saw the holotype and retained the species in *Pseudoschoengastia* in their "Acci Group".

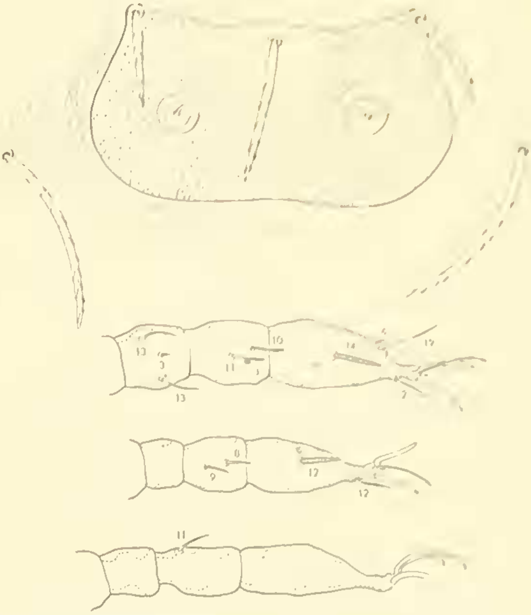

*Figure 1. Fauranius atecmartus.* Scutum and specialized setae of legs with measurements in microns.

Although we have not seen the holotype, it is clear from the description that *F. myoproctae* and *F. atecmartus* are closely related. Both are small, with corresponding small structures. Certain characteristics of *F. myoproctae* and *F. atecmartus*, respectively, are: leg index 570 and 519; dorsal formula 2-6-6-6-6-2-2 and 2-6-6-6-4-4; length of humeral setae 35$\mu$ and 34$\mu$ : length of other dorsals 20 to 29$\mu$ and 25 to 31$\mu$; eyes distinct 2/2 and eyes not discernible; lengths of tarsalae I and II 18$\mu$, 17$\mu$ and 14$\mu$, 12$\mu$.

*Crotiscus desdentatus tissoti* Fauran, 1960

Six specimens off *Proechimys guyannensis*, Lelydorp, 18 December 1969.

*Euschoengastia* (s. l.) *desmodus* (Brennan and Dalmat, 1960)

Two larvae from ventral wing membrane of *Glossophaga soricina*, Brownsweg, 9 February 1970; 1 off *Carollia perspicillata*, Onverwacht, 5 February 1970.

This bat chigger and a new species from Venezuela are being referred to a new genus in a subsequent paper.

### *Eutrombicula alfreddugesi* (Oudemans, 1910)

Five larvae off *Proechimys guyannensis*, Lelydorp, 18 December 1969; 3 off *P. guyannensis*, Uitkijk, 8 January 1970; 3 off 3 *Didelphis marsupialis*, Coronie, 29 November 1969 to 12 February 1970; 1 off *D. marsupialis*, Brokobaka, 21 February 1970; 2 off *Philander opossum*, Coronie, 10 January 1970; 6 off *Rattus rattus frugivorus*, Brokobaka, 21 February 1970; 4 off *Nectomys squamipes melanius*, Coronie, 12 February 1970.

### *Eutrombicula batatas* (Linnaeus, 1758)

Six larvae from ears of 3 *Rattus norvegicus*, Paramaribo, 13 and 15 January 1970; 2 from ears of *Herpestes auropunctatus*, Meerzorg, 3 March 1970; 1 from ears of *Tamandua tetradactyla*, Lelydorp, 17 December 1969; 1 from scrotum of *Eptesicus melanopterus*, Meerzorg, 3 March 1970.

This Linnaean species, the oldest recorded trombiculid mite, the "sweet potato chigger," is recorded again from the country of its discovery. For details concerning the history, biology and systematics of *Eutrombicula batatas* see Michener (1946), Jenkins (1949), and Fuller (1952).

### *Eutrombicula goeldii* (Oudemans, 1910)

Three specimens off *Proechimys guyannensis*, Lelydorp, 18 December 1969; 2 off *Didelphis marsupialis*, Coronie, 12 February 1970; 2 off *Epicrates cenchris* (rainbow boa), Brokopondo, 2 February 1970; 3 off *Psarocolius decumanus*, Lelydorp, 23 January 1970.

### *Eutrombicula tinami* (Oudemans, 1910)

Two larvae off *Didelphis marsupialis*, Brokobaka, 21 February 1970.

This form has not been recorded since it was described off Tinamou, Brazil. It is very close to, and may indeed prove to be *Eutrombicula goeldii* with branched palpogenual and palpoventrotibial setae.

An additional record is 5 specimens off *Proechimys semispinosus*, Galeta Point, Panama, 23 February 1950.

### *Microtrombicula fragibarba* (Brennan and Jones, 1960)

Eight larvae from ears of *Didelphis marsupialis*, Brokobaka, 21 February 1970; 7 off 2 *D. marsupialis*, Coronie, 29 November and 4 December 1969; 7 off *D. marsupialis*, Lelydorp, 12 January 1970; 1 off *D. marsupialis*, Paramaribo, 31 January 1970; 1 off *Philander opossum*, Coronie, 10 January 1970.

### *Microtrombicula* nr. *tragulata* (Brennan and Jones, 1961)

Six larvae off *Didelphis marsupialis*, Brokobaka, 21 February 1970.

### *Nasicola annereauxi* Brennan and Yunker, 1969

Twenty-six larvae from nasal passages of *Noctilio labialis*, Lelydorp, 23 January 1970; 43 from 3 *N. labialis*, Meerzorg, 2 March 1970.

This intranasal chigger of bats described from *Phyllostomus hastatus*, Venezuela is also known from *P. hastatus* and *N. labialis*, Colombia.

### *Odontacarus tubercularis* (Brennan, 1952)

Seven larvae off *Proechimys guyannensis*, Uitkijk, 8 January 1970; 1 off *Philander opossum*, Coronie, 28 November 1969; 2 off *P. opossum*, Coronie, 12 February 1970; 1 off *Nectomys squamipes melanius*, Coronie, 12 February 1970.

### *Parasecia aitkeni* (Brennan and Jones, 1960)

Four specimens off *Philander opossum*, Coronie, 10 January 1970.

### *Parasecia manueli* (Brennan and Jones, 1960)

One larva off *Proechimys guyannensis*, Uitkijk, 8 January 1970; 2 off *P. guyannensis*, Lelydorp, 18 December 1969; 12 off 4 *Philander opossum*, Coronie, 28 November 1969 to 12 January 1970; 4 off 3 *Didelphis marsupialis*, 29 November 1969 to 12 February 1970.

### *Parasecia valida* (Brennan, 1969)

Two larvae off *Proechimys guyannensis*, Lelydorp, 18 December 1969.

### *Perissopalla barticonycteris* Brennan, 1969

Five larvae off 2 *Carollia perspicillata*, Brownsweg, 10 February 1970.

### *Perissopalla ipeani* Brennan, 1969

Six larvae off 3 *Carollia perspicillata*, Onverwacht, 5 February 1970.

### *Quadreseta flochi* (Brennan and Jones, 1960)

Two larvae off *Proechimys guyannensis*, Uitkijk, 8 January 1970.

### *Speleocola secunda* Brennan and Jones, 1960

Three larvae off *Carollia perspicillata*, Zandery, 7 January 1970; 1 from ventral wing membrane of *Saccopteryx bilineata*, Lelydorp, 26 February 1970.

### *Tecomatlana (Hooperella) vesperuginis* (Brennan and Jones, 1960)

Thirteen larvae off 2 *Carollia perspicillata*, Zandery, 7 January and 1 February 1970; 2 off *C. perspicillata*, Brownsweg, 10 February 1970; 2 from wing membrane of *Saccopteryx bilineata*, Lelydorp, 26 February 1970; 6 from ventral wing membrane of 3 *Glossophaga soricina*, Brokopondo, 2 February 1970.

The following chiggers of Surinam, not listed here, were recorded recently by Brennan (1970).

*Arisocerus amapensis* Brennan, 1970
*Boshkerria punctata* (Boshell and Kerr, 1942)
*Colicus icomi* Brennan, 1970
*Colicus oblonga* (Fauran, 1959)
*Eutrombicula alfreddugesi* (Oudemans, 1910), *tropica* form of Ewing, 1925
*Pseudoschoengastia tricosa* (Brennan and Jones, 1961)
*Tecomatlana (Hooperella) saccopteryx* (Brennan and Jones, 1960)
*Trombicula* (s. l.) *palmigera* Fauran, 1960

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# VARIATION AND GEOGRAPHIC DISTRIBUTION IN SOME ARGENTINE AND CHILEAN OSMYLIDAE, WITH A NEW SPECIES OF *KEMPYNUS* (NEUROPTERA).

PHILLIP A. ADAMS[1]

ABSTRACT: A similar color variation, which consists in longitudinally streaked wings, occurs in *Kempynus falcatus* Navás and *Phymatosmylus caprorum* Adams. These species are sympatric with the newly described *Kempynus crenatus* on the western slope of the Andes between 34°30′ S and 40° S, but further south in Chiloé and Aysén, *K. falcatus* occurs on the coast.

The material discussed below was not available for inclusion in my recent paper on South American Osmylidae (Adams, 1969). *Kempynus* is of particular interest because it includes species from Australia-New Zealand and South American (Kimmins, 1940). I am grateful to Ellis MacLeod of the University of Illinois, Urbana, for the loan of specimens and for helpful comments.

### ***Kempynus crenatus***, new species
Figures 1; 2A, C, E-H

*Description:* Head pale with the following fuscous marks: dark border of antennal sockets confluent with large frontoclypeal triangle which has apex at anterior clypeal margin, spots anterior to anterior tentorial pits, borders of ocelli and vertex scars. Mouthparts fuscous, antennae pale. Pronotum pale, dark dotted, four black spots on transverse furrow. Mesonotum pale, dark-punctate, prescutum with

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